REMARKS

The foregoing amendment amends Claim 1. Now in the application are Claims 1-8 of which Claim 1 is independent. No new matter has been added. The following comments address all stated grounds for rejection and place the presently pending claims, as identified above in condition for allowance. Attached hereto, on a page entitled **"Version with Markings to Show Changes,"** is a marked-up version of the changes made to the claims by the current amendment.

Rejection under 35 U.S.C. §112

Claim 1 stands rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as his invention. Applicant amends Claim 1 to remove the use of the pronoun "same" in step (a) and insert in its place the word "messages". The amendment to Claim 1 expressly addresses the Section 112 rejection, and is not directed to any art rejection. Accordingly, Applicant request the Examiner to reconsider and withdraw the rejection under 35 U.S.C. §112.

Description and Advantages of the claimed invention:

Military equipment, such as ships, aircraft, and vehicles periodically transmit data indicative of their location, speed, armament, status, and the like. The data is sent via a wireless transmission and is referred to as a tactical data link (TDL) message. The received data is used by the appropriate field commanders to command, control and coordinate military personnel and equipment in battle situations. Although the TDL message types and formats are defined by a

standard, there often exists interpretation differences amongst the various member nations of the North Atlantic Treaty Organization (NATO). Consequently, a conflict often arises when TDL messages are exchanged between military units of the member nations. An example of one possible conflict is the expectation of receiving data representing the speed of an aircraft, but instead receiving latitude data from the aircraft.

Given that each transmitting piece of military equipment transmits about 10 MB of data per hour during a military operation that can last one or more days, the volume of data an operator must sort through to identify and resolve data conflicts requires the use of databases to analyze the data. However, the conversion of the data into a form readable by the database, along with the generation of queries and analysis of the query results to detect data conflicts often takes several days to complete.

The claimed invention addresses the need of providing data analysis of received TDL messages in a timelier manner. Specifically, the present invention is able to assign a TDL message to a specific message group that contains TDL messages of a specific message type. Within each message group the claimed invention tabulates the messages so as to align corresponding data fields and displays the data in tabulated form. In this manner, unusual or spurious data entries are detected in a more timely manner that allow analysis results to be presented as part of a post operation debrief.

Advantageously, the claimed invention may be implemented using commercially available software, such as Microsoft® Excel® or another suitable spreadsheet application.

Further, a list of field contents for each data field can be displayed and the list can be filtered to remove repeat instances of the same content. As such, the claimed invention advantageously allows an operator to detect a conflict by reviewing the content of a selected data field and determining if the list contains the proper data content for the respective data field.

The Claims Distinguish from the Applied Art.

The claimed subject matter differs from and is patentably distinct from the applied art. The Examiner rejects Claims 1-7 as being unpatentable over U.S. Patent No. 5,923,846 of Gage, et al., (hereinafter "Gage") in view of U.S. Patent No. 5,381,477 of Beyers, II *et al.* (hereinafter "Beyers II"). The Examiner further rejects Claim 8 as being unpatentable over of Gage in view of Beyers II and further in view of U.S. Patent No. 5,971,580 of Hall et al. (hereinafter "Hall"). Applicant respectfully submits that claims 1-8 are not obviated by the art of record for the reasons set forth below.

The Gage patent discloses an architecture for a bulletin board system (BBS). A BBS serves as an information and file passing center that allows users to upload and download files to and from a particular location on a computer network. The operation of uploading or downloading a file in the BBS is often referred to as posting (i.e. as in posting a note on a bulletin board). In some instances the particular location on the computer network where the posting is posted is a publicly accessible location and in other instances the particular location on the computer network where the posting is posted is a private or member only accessible location. The BBS of Gage provides a mechanism for linking an object to a bulletin board

posting. Specifically, Gage teaches and discloses the use of bulletin board postings that contain an embedded object that retains a link to an associated data file. *See Column 6, lines 60-63.*

The bulletin board postings taught and suggested by Gage include a header portion that includes a destination for the posting, the name of the person making the posting, the subject of the posting, and the date and time of the posting. *See Column 9, lines 45-51.* Gage fails to teach or suggest the receiving of a plurality of data link messages, storing each data link message in a database, and assigning each data link message to one of a plurality of message groups according to the message type field so that each group contains data link messages of specific message type, where the data link messages are formatted digital data sequences transmitted between units and include a message type field and at least one message content field whose meaning is determined by the message type, as recited in Claim 1.

In contrast, the data link messages recited in Claim 1 are formatted digital data sequences that are typically transmitted between units, such as military units. Each data link message analyzed by the method recited in Claim 1 includes a message type field and at least one message content field whose meaning is determined by the message type. That is, different message types have completely different formats and contain different information. For example, a track type message contains content fields that relate to position (latitude and longitude), velocity, and vehicle type that is reporting the information. See page 6, lines 18-24 and page 7 lines 6-7 of the specification. In this manner it is known for each message type a data content type for each content field, for example, numeric data, textual data, or a combination of both.

Accordingly, Gage fails to teach or suggest a method for receiving and storing a plurality of data link message having a message type field and at least one message content field whose meaning is determined by the message type as recited in Claim 1.

The Beyers II patent is directed to a method of selecting individual subscribers to subscription television systems for inclusion in groups by means of certain selection criteria. The object of Beyers II is to provide cable system operators with an improved ability to provide subscribers of subscription television services with individualized messages, want ads, public service announcements and such to individuals or groups of individual.

The Examiner cites Beyers II as teaching or suggesting steps of tabulating messages so as to align corresponding message content fields; displaying the tabulated messages so that the corresponding message content fields are aligned; and displaying a list of the field contents for each message content field, the list being filtered to remove repeated incidence of the same content. *See, Figures 8A-8C; column 17, lines 55-67; column 20, lines 42-50; and column 21, lines 40-60.* Nevertheless, a careful reading of the cited passages appears to contradict the Examiner's assertions, failing to detract from the patentability of Claim 1. For example, the cited passage from column 17 is a reference to the deletion of a group of entries from a database. As such, the method of Beyers II upon receiving this request instructs the cable television system to search for any entries which match the criteria of the group to be deleted and deletes each such record. Conversely, Claim 1 recites a step of displaying a list of filed contents for each message content field, the list being filtered to remove repeated incidence of the same content.

Accordingly, Applicant's invention performs a selected process so that identical entries remain for display and not a selective deletion.

Moreover, the cited passages in *columns 20 and 21* of Beyers II fail to cure the factual deficiencies of Gore. Specifically, non of the cited passages in Beyers II teaches or suggests the collation of the filed contents for the selected message content field and the display of those content values filtered to remove repeated incidences. A review of Figure 4 from the Beyers II patent provides an indication that the only filtering occurring in Beyers II is RF signal filtering, not filtering of a displayed list of field contents for each message content field.

Gage fails to teach or suggest each and every element of Applicant's claimed invention. Moreover, the Examiner admits on page 6 of the paper mailed April 2, 2002, that Gage fails to teach or suggest a data link message having a message type field and at least one message content field whose meaning is determined by the message type, as recited in Claim 1. *See, page 6, paragraph 5 of the Office Action mailed April 2, 2002.* As such, Beyers II fails to cure the factual deficiencies of Gage, for Beyers II fails to teach or suggest, *inter alia*, a data link message having a message type field and at least one message content field whose meaning is determined by the message type. Hence, Gage and Beyers II, either alone or in combination, fail to teach or suggest all of the elements in Claim 1, and, thus Claims 2-7 which depend, directly or indirectly, from Claim 1, and thereby incorporate the novel features of Claim 1.

Furthermore, any teaching or suggestion to combine the cited references while providing a reasonable expectation of success is not found in either of the cited references. The Gage

patent is directed to a BBS architecture; while the Beyers II patent is directed to a cable television system architecture, two distinct and highly complex technologies. As such, the unrelated technologies in the Gage patent and the Beyers II patent do not provide a motivation or suggestion to one skilled in the art to combine the references nor do they provide any reasonable expectation of success to combine if the references are combined. The architectures and technologies employed by the Gage patent and the Beyers II patent do not appear compatible. For example, the Gage patent appears to employ connection-less communication techniques while the Beyers II patent appears to employ connection-oriented communication techniques.

Accordingly, Applicant requests the Examiner to reconsider and withdraw the rejection of Claims 1-7 under 35 U.S.C. §103.

Rejection of Claim 8 under 35 U.S.C. §103

Claim 8 stands rejected as unpatentable under Gage, in view of Beyers II and further in view of Hall. Applicant contends that Claim 8 is patentable over Gage in view of Beyers II in further view of Hall.

Hall is directed to a tactical awareness monitoring and direct response system for evaluating, monitoring, and controlling, in real-time, an outside environment having entities and occurrences with characteristics.

The Examiner cites Hall for teaching or suggesting that the messages are tactical data link messages originating from a plurality of military platforms. Nevertheless, Hall fails to cure the

factual deficiencies of Gage and Beyers II. That is, Hall fails to teach or suggest, *inter alia*, that the tactical data link messages are formatted digital data sequences transmitted between units that include a message type field and at least one message content field whose meaning is determined by the message type. Accordingly, the combination of Gage in view of Beyers II in further view of Hall, fails to teach or suggest each and every element of Claim 8, which depends, directly or indirectly, from Claim 1.

Moreover, the Examiner fails to establish a motivation or a suggestion for one skilled in the art to combine a BBS architecture with a cable television architecture and a military awareness monitoring system architecture to form Applicant's claimed invention. Furthermore, the disparate technologies employed by each architecture present a formidable task for integration into a single architecture providing one skilled in the art with no reasonable expectation of success.

Accordingly, the Applicant requests reconsideration and withdrawal of the rejection of Claim 8 under 35 U.S.C. §103.

CONCLUSION

Applicant contends that the claims patentably distinguish over the cited art. The art is devoid of facts that render the claimed invention obvious to one of ordinary skill in the art when considering the U.S. Patent of Gage, the U.S. Patent of Beyers, II et al. and the U.S. Patent of Hall, et al. Accordingly, reconsideration and allowance of claims 1-8 is in order and requested.

If there are any remaining issues an opportunity for an interview is requested prior to issuance of another Office Action.

Respectfully submitted,

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"VERSION WITH MARKINGS TO SHOW CHANGES"

In the Claims:

Please amend claim 1.

1. (Twice Amended) A method of analysing data link messages,

the data link messages being formatted digital data sequences transmitted between units, including a message type field and at least one message content field whose meaning is determined by the message type;

the method comprising the steps of:

(a) receiving a plurality of data link messages and storing the messages [same] in a database;

(b) assigning each data link message to one of a plurality of message groups according to the message type field so that each group contains data link messages of a specific message type;

(c) within each of the message groups ,

(i) tabulating the messages so as to align corresponding message content fields;

(ii) displaying the tabulated messages so that the corresponding message content fields are aligned; and

(iii) displaying a list of the field contents for each message content field, the list being filtered to remove repeated incidence of the same content.